

Regarding the NPRM, Paragraph 70.  
Using BAS for telemetry and Control:

It is proposed in this NPRM that BAS use of channels for control and telemetry now provided for in Group P remain unchanged at 10 kHz spacing. Today I was trying to file an application to use a coordinated frequency of 455.02 MHz. However, the radio, a Teledesign [http://www.teledesignsystems.com/products.html ] TS4000 2 Watt radio modem has been designed for 6.25 KHz, 12.5 and 25 KHz spacing. It will not rest on 455.02. A modern data radio modem results in more efficient use of spectrum to control and meter the TV Class A transmitter we have in use on Mount Susitna, about 40 air line miles distant from our studio. The 1 kW transmitter is equipped with an inter unit data and control line which appears on an external data socket. By simply plugging a modem into the socket, a remote user can use vendor software to control and meter all aspects of the transmitter. Control and metering can be accomplished in one data burst of about 1/4 second duration using the Teledesign radio. Adjustments to the broadcast signal might require bursts each second over a period of time until the adjustment is complete. However, since the broadcast transmitter can run automatically for months, there might be long periods of time, maybe even months between use of the radio channel.

Unfortunately I have had to select a channel that happens to align with 6.25 KHz spacing but is not reserved for telemetry and control. No Group P channel lines up. The channel I just applied for in Group N1 and R (455.0375) is not reserved for telemetry and control, and since we have no means of monitoring activity on the frequency, we may interfere with other users and they may interfere with us. [although the radio does allow CSMA operation, we do not know if this digital setting works to prevent interference to analog users, and if it did work, the result might be long periods in which we face total loss of control of our broadcast transmitter should a long term radio remote broadcast camp out on the channel].

Coordination services:

My original intent was to use the Teledesign radio on an industrial split channel frequency. I was forced by FCC rules to use a commercial frequency coordination company. I called one up, and sent them the application form I had fully filled out, but which the FCC ULS computer would not accept or even save, learning after the fact that only frequency coordinators are allowed to enter data. Although no other users of that prospective channel were found one the WLS search page as licensed anywhere in the State of Alaska, and adjacent channel users were quite distant, I was sure coordination would be no problem. How wrong I was.

The nearest possible co channel user would have to be in Canada, more than 300 miles distant from Anchorage. Still the commercial coordinator could not satisfy our communication needs. They said there was no way to license the radio with 20 Watts ERP at the height of our transmitter, 3100 meters. However, given the distance distance, and a reasonable margin for successful data link, we thought about 20 Watts was required. I ask them repeatedly to tell me what FCC rule limits ERP. They never replied. I looked, but could not find it. I gave up on use of this perfectly fine totally empty channel because the coordinator was unable to file.

Instead, today, I have filed to plunk the data radio signal into the middle

of an RPU channel that would be better reserved for remote radio broadcasting. My suggestion for this proceeding is that Group P control and telemetry channels be locally coordinated, that they be defined as blocks of spectrum with no channeling reserved solely and exclusively for broadcast control and telemetry with a maximum allowed bandwidth to be occupied consistent with 12.5 KHz spacing, and that the P block be expanded from 20 KHz to 25 KHz so that it better meshes with channeling in other services. Local coordinators can designate center frequencies depending on the type and nature of the equipment available.

Furthermore. in view of my lack of success using a commercial coordination company, it makes sense that all BAS applications be allowed to continue to utilize volunteer broadcast coordination services in local communities, or, where no local coordinator is available, to allow applicants to self coordinate by contacting all licensees on co and adjacent channels within specified distances depending upon HAAT and ERP with consideration given to directional transmitting and receiving antennas. A table or graph could show the coordination distance required.

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